

Examiner Elli Peselev required restriction of the Claims between two groups: Group I, consisting of Claims 1-15, and Group II, consisting of Claims 16 and 17. Claims 18 and 19 were held to link Groups I and II. The Applicants' representative, Carolyn Favorito, elected Group I in a verbal response to the restriction requirement. Therefore, Claims 16 and 17 have been withdrawn from prosecution. The Examiner rejected Claims 1-15, 18, and 19 in the Office Action mailed July 10, 2002.

Careful consideration has been given to the grounds for rejection, and the following amendments and remarks are offered in traverse. The Applicants respectfully request favorable reconsideration of the objections and rejections set forth in the Office Action mailed July 10, 2002, in view of the amendments and remarks below. A petition for a 3-month extension for responding to the outstanding Office Action is included herewith.

### AMENDMENTS

#### Amendments to the Specification

Please delete the words between brackets and insert the words underlined.

On page 12, at line 13 thereof, between the words "substituted alkenylaryl," and "unsubstituted alkenyl" please insert --or-- as shown below for the paragraph starting at line 1 of page 12:

In another aspect of the present invention, compounds are provided of structures I and II wherein: R is hydrogen, substituted C<sub>1</sub>-C<sub>5</sub> alkyl, unsubstituted C<sub>1</sub>-C<sub>5</sub> alkyl, substituted aryl, unsubstituted aryl, substituted alkylaryl, or unsubstituted alkylaryl; R<sup>0</sup> is hydroxyl or methoxy; R<sup>1</sup> is hydrogen or hydroxyl; R<sup>2</sup> and R<sup>3</sup> are each independently substituted C<sub>1</sub>-C<sub>5</sub> alkyl, unsubstituted C<sub>1</sub>-C<sub>5</sub> alkyl, substituted phenyl, unsubstituted phenyl, substituted benzyl or unsubstituted benzyl; R<sup>4</sup> is methyl; R<sup>5</sup> is hydroxyl or oxo; R<sup>6</sup> is hydrogen, hydroxyl or OR<sup>12</sup> wherein R<sup>12</sup> is substituted C<sub>1</sub>-C<sub>5</sub> alkyl or unsubstituted C<sub>1</sub>-C<sub>5</sub> alkyl; R<sup>7</sup> is substituted methyl, unsubstituted methyl,

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substituted C<sub>3</sub>-C<sub>5</sub> alkyl, unsubstituted C<sub>3</sub>-C<sub>5</sub> alkyl, substituted C<sub>2</sub>-C<sub>5</sub> alkenyl, unsubstituted C<sub>2</sub>-C<sub>5</sub> alkenyl, substituted C<sub>2</sub>-C<sub>5</sub> alkynyl, unsubstituted C<sub>2</sub>-C<sub>5</sub> alkynyl, substituted aryl, unsubstituted aryl, substituted alkylaryl or alkenylaryl; R<sup>8</sup> is substituted C<sub>1</sub>-C<sub>5</sub> alkyl, unsubstituted C<sub>1</sub>-C<sub>5</sub> alkyl, substituted C<sub>2</sub>-C<sub>5</sub> alkenyl, unsubstituted C<sub>2</sub>-C<sub>5</sub> alkenyl, substituted C<sub>2</sub>-C<sub>5</sub> alkynyl, unsubstituted C<sub>2</sub>-C<sub>5</sub> alkynyl, substituted aryl, unsubstituted aryl, substituted alkylaryl, unsubstituted alkylaryl, substituted alkenylaryl, or unsubstituted alkenylaryl; and, x is single bond or a double bond.

On page 18, at line 17 thereof, after "Volchegursky", please replace "(Attorney Docket No. 30062-20047.20)" with --U.S. Serial No. 10/125,815--, as indicated below for the paragraph starting at line 10:

For erythromycins where the substituent at C-13 is methyl or ethyl, the 6-deoxyerythronolide B synthase ("DEBS") from *S. erythrnea* can be used in a recombinant expression system described in U.S. Patent No. 5,672,491 to produce the aglycone in *Streptomyces coelicolor*. Optionally, the oleandolide or megalomicin polyketide synthase ("PKS") genes may be used in this expression system. See U.S. Provisional Patent Application Serial No. 60/158,305 filed October 8, 1999 and utility application Serial No. 09/679,279 filed October 4, 2000 entitled Recombinant Megalomicin Biosynthetic Genes by inventors Robert McDaniel and Yana Volchegursky [(Attorney Docket No. 30062-20047.20)] U.S. Serial No. 10/125,815; and PCT Publication No. WO 00/026349 which are all incorporated herein by reference.

On page 20, at line 14 thereof, please replace "erythromcyins" with --erythromycins--, as indicated below for the paragraph starting at line 10.

Other starting materials include 6-hydroxy-erythromycin (where the methyl at C-6 has been replaced with a hydroxyl group), 6-oxo erythromycin (where the methyl at C-6 has been replaced with an oxo group), 6-methoxy erythromycin (where the methyl at C-6 has been replaced with a methoxy group) and 6-desmethyl, 7-hydroxy-erythromycin. In one embodiment, 6-OH, 6-OMe [erythromcyins] erythromycins are made by replacing AT4 of 6-dEB or 8,8a- deoxyoleandolide synthase with an AT domain encoding hydroxymalonate or methoxymalonate. See PCT Publication WO 00/20601 which is incorporated herein by reference. The 6-OH and 6-OMe aglycone is bioconverted to 6-desmethyl-6-hydroxy erythromycin and 6-desmethyl-6-

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